

SPLASH 2004: NOAA Ship McArthur Weekly Science Report

22 July 2004

Jay Barlow, Cruise Leader

SCIENCE SUMMARY: Thursday, 15 July to Wednesday, 21 July 2004

The blues are hard to shake. We had two more sightings of blue whales last Thursday, about 50 miles south of last week's sighting. Once again we managed to get photos and biopsies. (See info on a possible blue whale match, below.) One blue whale was a miracle. The second was special. To many of us, the third was like that third helping of dessert. Maybe it would have been better to stop with seconds.

On Friday we ended effort near Middleton Island, at the entrance to Prince William Sound. We found a nice cluster of humpbacks there. We started effort the next day near the same area, but we started with killer whales (Richard's 5am sighting) and never found the humpbacks again. From that point, we started the longest offshore leg of our trip. Fortunately, we did continue to find small, isolated groups of humpbacks even in the far offshore waters (over 200 miles from land). These samples are particularly valuable because no one else will be sampling these waters as part of the SPLASH project. It will be very interesting to see if offshore humpbacks mix freely with the ones that are usually photographed much closer to shore.

On our offshore jaunt, we traversed over several seamounts, including the Patton Sea Mount that rises from abyssal depths to within 100 fathoms of the surface. Around each of these seamounts, we found lots of Baird's beaked whales. We got some pictures, video, and even biopsies from them. As we returned to more nearshore waters off Kodiak Island, we encountered our second major weather system of the trip. Winds were up to 25 kts and seas were building. We abandoned our plans to visit Barren Island and Portlock Bank east of Kodiak Island. Instead we set course for the west end of Kodiak Island and Albatross Bank. The weather prediction calls for lower winds, big swell, and widely scattered humpbacks.

All week we've been pestered by fin whales and killer whales. Fin whales are pests because there are so many of them ... and we have to check out each blow to make sure it is not a humpback. "Looks like another fin whale ...". Killer whales are pests because they are way more interesting than humpback whales. Everybody mobilizes for a killer whale sighting. The small boat is launched, every camera body is slung around somebody's neck, and acoustics is putting in the array or getting ready to toss a sonobuoy. Even the cruise leader may be seen on the flying bridge. Of course, all of this takes a great deal of time, and now with an average of about 2 killer whale sightings per day, we are finding that it is cutting into our humpback search time. Balancing the time spent with killer whales and the primary mission of this survey (humpback whales) is probably the hardest job of the cruise leader. Fortunately, the cruise leader doesn't have much else to worry about with this crew.

RE-SIGHTING NEWS:

This week we found two matches of our humpback flukes to the catalog for Southeast Alaska. One was an animal we photographed in Chatham Strait which had been previously photographed in Frederick Sound and Sitka Sound. It is an outgoing, photogenic whale who is always in front of a camera. It has been previously photographed in 1994 (birth year), 95, 96, 98, 99, and 2000. The second was humpback that we photographed west of the Fairweather Grounds; we don't know the history of this whale yet. Thanks to Jen Cedarleaf and Jan Straley for providing the match information.

We also have a possible match to one of our blue whales. It appears to match an animal that previously had only been photographed in Southern California (in 1995 and 1998). Confirmation of this match will need to wait until we can transmit high-resolution photographs from Kodiak. Thanks to Cascadia Research for the re-sighting information.

Sightings and Effort Summary for Marine Mammals

Date	Start/Stop Time	Position	Total Distance	Avg. Beaufort
071504	0559 2120	N59:17.17 W143:52.94 N58:13.80 W145:00.78	61.3 nmi	1.3
071604	0600 1908	N58:08.86 W145:06.20 N59:18.10 W146:21.03	79.3 nmi	2.8
071704	0806 2106	N59:52.73 W146:49.01 N58:09.82 W147:41.49	85.4 nmi	3.6
071804	0559 2113	N56:51.67 W147:59.26 N55:22.83 W148:21.73	84.2 nmi	3.6
071904	0608 1950	N54:15.87 W149:02.24 N54:24.69 W150:18.24	98.9 nmi	3.4
072004	0625 2111	N54:31.17 W150:16.30 N55:29.16 W152:16.45	73.7 nmi	2.0
072104	0623 1321	N55:31.81 W152:10.39 N56:07.85 W151:08.09	31.8 nmi	4.6

CODE	SPECIES	TOT#
037	Orcinus orca	6
046	Physeter macrocephalus	14
051	Mesoplodon sp.	3
061	Ziphius cavirostris	3
063	Berardius bairdii	6
070	Balaenoptera sp.	7
074	Balaenoptera physalus	49
075	Balaenoptera musculus	2
076	Megaptera novaeangliae	20
079	unid. large whale	3
081	Mesoplodon stejnegeri	1
096	unid. cetacean	1
098	unid. whale	1
	TOTAL	116

note: Dall's & harbor porpoises and pinnipeds are not included.

Photo-Project (Holly Fearnbach)

Species	Weekly #	Cumulative #
Humpback whale		
Catalog-quality flukes	24	194
Fin whale dorsal IDs	11	38
Sperm whale fluke IDs	2	9
Blue whale dorsal IDs	2	3
Killer whale dorsal IDs	34	44
Baird's beaked whales	15	15
Northern right whale dolphins*	0	1
Pacific white-sided dolphins*	0	3
Cuvier's beaked whale (dead)	0	1
Steller sea lion	0	1

*number of groups photographed

Acoustics Squeakly Report

Julie and Shannon have returned to their proper stomping grounds: the big deep blue. Unfortunately, the cold waters have decreased our ability to hear animals at a distance. Despite this, we have been able to detect a plethora of sperm whales. Two more sonobouys on blue whales have failed to yield any vocalizations, and the humpbacks don't care to chat with us, either. Our killer whale encounters have varied considerably and we hope that by the end of the trip we'll have a decent set of recordings for comparison of the vocalizations of the offshore, resident, and transient groups. As for Berardius ... we have several high frequency recordings of their echolocation clicks, as well as some nice recordings of lower frequency (audible) calls.

Biopsies (Juan Carlos Salinas)

Species	Weekly	Cumulative
Humpback whale	15	134
Fin whale	5	25
Blue whale	2	3
Sperm whale	0	4
Killer whale	10	15
Baird's beaked whale	3	3
Dall's porpoise	0	1
Cuvier's beaked whale*	1	1

*dead when sampled

The Poetry Corner (Lilian Carswell, SPLASH Poet Laureate, Emeritus)

The blue hour

(for our first blue whale sighting on 14 July, 6:24 PM)

It was the blue hour, Katie said,
Siri's time for cocktails
For drinking in whales
The sea was our punchbowl, straight ahead.

The one at the bar gazed out at gray vastness
Two shuffled around
Straining to sound
The depths of their big empty glasses.

But by 5:42 we were swilling--
Fin whales we tossed back
Dall's cocktails in the slack
Humpback shots as soon taken refilling.

A sperm whale soon swirled in the mix
We came to feel giddy
To find ourselves witty
And still not yet quarter past six.

There were thirteen minutes between rounds
To metabolize
To blink dazed eyes
While beyond there were mixed new compounds.

Now at the bar, Richard held up his glasses
He said, "Fill up these,"
"Something blue, if you please,"
And they brimmed with Curacao masses.

We all then demanded it too
And each glass overfilled
With strong drink as we willed
And we drank in the powerful brew.

We then mixed up the blue in many a way
Straight up with ship chaser
With sonobuoy tracer
And at last thought to call it a day.

But never drunk enough it would seem
We chased the blue's tail
With a Minke whale
That Allan served late from the beam.

Oceanographic Operations (Lillian Stuart)

Date	Number CTDs
7/15	1
7/16	1
7/17	1
7/18	1
7/19	1
7/20	1
7/21	1